

Title (en)  
CHARGED PARTICLE BEAM DEVICE AND SAMPLE PRODUCTION METHOD

Title (de)  
VORRICHTUNG FÜR GELADENE TEILCHENSTRAHLEN UND PROBENHERSTELLUNGSVERFAHREN

Title (fr)  
DISPOSITIF À FAISCEAU DE PARTICULES CHARGÉES ET PROCÉDÉ DE PRODUCTION D'ÉCHANTILLON

Publication  
**EP 2592643 A1 20130515 (EN)**

Application  
**EP 11803566 A 20110705**

Priority  
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Abstract (en)  
Provided is a technique capable of removing a damaged layer of a sample piece generated through an FIB fabrication sufficiently but at the minimum. A charged particle beam device includes a first element ion beam optical system unit (110) which performs a first FIB fabrication to form a sample piece from a sample, a second element ion beam optical system unit (120) which performs a second FIB fabrication to remove a damaged layer formed on a surface of the sample piece, and a first element detector (140) which detects an first element existing in the damaged layer. A termination of the second FIB fabrication is determined if an amount of the first element existing in the damaged layer becomes smaller than a predefined threshold value.

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